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ABSTRACT

To determine whether modeling of infant care by males would increase young boys' interest in babies, a study was conducted with up to 34 white, middle-class children who attended a university day care center and who ranged in age from 2 to 6 years. Procedures involved 3 days of pretest data collection, 4 weeks of treatment presentation, and 3 posttest observation days. Three white babies served as stimulus infants. Baseline data on children's attention to a playpen were gathered under three conditions (playpen empty, containing goldfish in a bowl, containing a baby). Modeling experiences were then implemented. A videotape showing a man caring for a baby was seen at least twice by boys over the age of 3.5. On three or four occasions, each older boy was shown a book depicting men interacting with and caring for babies. Younger boys and girls were also exposed to the videotape; however, girls and younger boys were not shown the book. To assess treatment effects, data were gathered with the playpen empty, with baby and children of all ages present, and with baby and only older children present. Results indicated that older boys' interest in a baby could be increased through modeling. (RH)

Interaction with an Infant by Preschoolers: An Attempt to Modify the Sex Difference

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Paper presented at the Society for Research in Child Development

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While for many years (Hutt, 1972; Maccoby & Jacklin, 1974) people have assumed that women and girls are more interested in nurturing infants than are males, this question has only recently been examined by the scientific community. In the last few years a body of data has been accumulating suggesting that, at least at some ages, this widely held assumption does have some support. Researchers have found a sex difference in degree of interaction with an infant by preschoolers (Berman, Monda, & Myerscough, 1977; Berman, Sloan, & Goodman, in press; Blakemore, 1981), school-aged children and adolescents (Blakemore, 1981; Feldman & Nash, 1979a; Feldman, Nash, & Cutrona, 1977; Frodi & Lamb, 1978), and adults (Blakemore, 1981; Feldman & Nash, 1978; 1979b).

Researchers examining the adulthood period have been exploring possible causes for this sex difference. During adulthood the sex difference frequently is not found (Bem, Martyna, & Watson, 1976; Feldman & Nash, 1978; 1979b). Feldman and Nash, who have been studying this period in detail argue that the demands for sex-role behavior at various stages during adulthood produce this sex difference at some times, (e.g., parenthood) while not at others.

During childhood the sex difference is more consistently found, but so far the reasons for its existence have not been explored. One possibility is that young boys learn to avoid infants by observing that most infant care is done by girls and women. In support of this contention it has been found that (Berman et al., 1977) boys with an

infant sibling are particularly likely to avoid interacting with infants.

If imitation is one of the causes of this sex difference, and it seems plausible that it is, then perhaps modeling of infant care by males would increase young boys' interest in babies. The present study was conducted to test this possibility. An observer recorded preschool boys and girls' interest in a baby who was brought to their day-care center. After these pretest observations, the children, particularly the older boys, were provided with pictured and videotaped examples of men interacting with and caring for babies. Finally, the children's interest in babies was again assessed.

Method

Subjects. Children ranging in age from 2 to 6 were observed at a university day-care center. All children who were present and not napping were free to visit the observation area. The number of children present ranged from 11, during an observation period when younger children were specifically excluded, to 34. The children were primarily white and middle class; the children of students, faculty and staff of the university.

Stimulus Infants. Three white babies served as stimulus infants. Baby 1 was a 14-month-old male; Babies 2 and 3 ranged from 6 to 9 months of age at the various testing times, and were both female.

Procedure. Much of the procedure for the pre- and posttests of this study is based on a study by Berman et al. (1977). Initially, three days of pretest data were collected. A playpen was placed in an area of the day-care center against a wall, and a chalk semi-circle

was drawn on the floor to define an observation area surrounding the playpen. This area had a radius of approximately 2 meters. Every child in the center had a number on his or her back, odd numbers for males and even numbers for females. A female observer present in the classroom recorded which children entered the observation area. A half-hour observation period was divided into 5-minute periods: The children were observed for 5 minutes, and then the observer rested for 5 minutes, resulting in three 5-minute periods of data collection. Therefore, each child in the center could have a score of 0 to 3 on any given day, based on the number of recording intervals during which the child entered the playpen area. On the first day the playpen was empty, on the second day it contained a goldfish in a bowl, and on the third day, a baby (Baby 1). After examining this baseline data it was clear that no sex difference had emerged when the baby was present, or, for that matter; on any baseline day. In fact, the youngest boys were very interested in the baby. An additional baby (Baby 2) was therefore brought to the center to confirm this finding. Finally, on a fifth day of observation Baby 3 was brought to the center during a period when younger children were napping, so only older children would be present. Unfortunately almost no girls were present during this observation, however, the older boys clearly ignored the baby.

After the pretesting, the modeling experiences took place. For approximately 4 weeks a female undergraduate visited the day-care center regularly and showed a videotape of a man caring for a baby. The boys over the age of 3 1/2 saw the tape at least two times each. Younger boys and girls were also exposed to this videotape which was

played in an open area of the day-care center. In addition to the videotape, each older boy was shown a book containing pictures of men interacting with and caring for babies. The boys were shown the book three or four separate times. Girls and younger boys were not shown this book.

Following the modeling were three posttest observation days: a day with the playpen empty, a day with a baby (Baby 2) in the playpen when all ages were present, and a day with a baby (Baby 3) when only older children were present.

Results

The pretest data were analyzed with a 2 (sex) X 5 (day) ANOVA. In order to be conservative, the second factor (day) was treated as a between-subjects factor because there was some variability in the specific subjects who were at the center from day to day. The effect of day of observation was marginally significant, F (4, 120) = 2.32, p < .06. This reflected less interaction near the playpen when only the older children, who were primarily boys, were present.

The posttest data were analyzed with a 2 (sex) X 3 (day) ANOVA, which produced no significant results. A comparison of the pre- to posttest was made, eliminating the two non-comparable pretest days. To clarify, the comparable days were: empty playpen, the observation with a baby and all ages of children present (Baby 2), and the observation of the older children with a baby (Baby 3). This 2 (pre/post) X 2 (sex) X 3 (day) ANOVA yielded a significant Pre/Post X Day interaction, F (2, 147) = 4.57, p <.02. This indicated an increase in interest in the baby on the posttest day when only older children were present. These data are presented graphically in Figure 1.

Insert Figure 1 about here

It is clear that both boys and girls increased their interest in the baby on the posttest day when only older children were present. The reason for the girls' behavior is not clear from this study. As previously mentioned very few (three) older girls were present on the pretest day, and they were occupied in another area of the center. On the comparable posttest day, six girls were present and their activities brought them in the vicinity of the baby. It is therefore probable that this finding is an artifact and not a response to any modeling. The situation for boys was quite different, however. Eight boys were present on that pretest day and were playing very close to the playpen area. The presence of the baby was definitely known to them and they very pointedly ignored her. A comparable number (nine) of boys were present on the postest day, and their level of interaction with the baby very clearly increased. It is reasonable to assume that this was indeed a result of the modeling experience.

Discussion

Two findings of this study are of significance. It was difficult to establish a sex difference during the pretest period. It became clear that a few very young boys were spending a great deal of time with the baby. When the children were observed at a time when 2-year-olds were absent, (nap-time), the older boys did ignore the baby, confirming previous research. This is an important finding because previous researchers have not examined the behavior of such young

preschoolers with infants. It appears that a sex difference does not appear at this age. It is interesting that Berman and her colleagues (Berman et al., 1977; Berman et al., in press) have reported the sex difference to be stronger in older preschoolers than in younger, which is consistent with the present finding. However their subjects have not been as young as these. If this finding can be replicated then questions arise about when the sex difference begins, and of course, why it occurs at all.

The results of this study also indicated that it was possible to increase the older boys' interest in a baby through modeling. This suggests that imitation may be an important basis of the sex difference among older preschoolers. This finding must also be extended, including an examination of a possible cognitive basis for such imitation.

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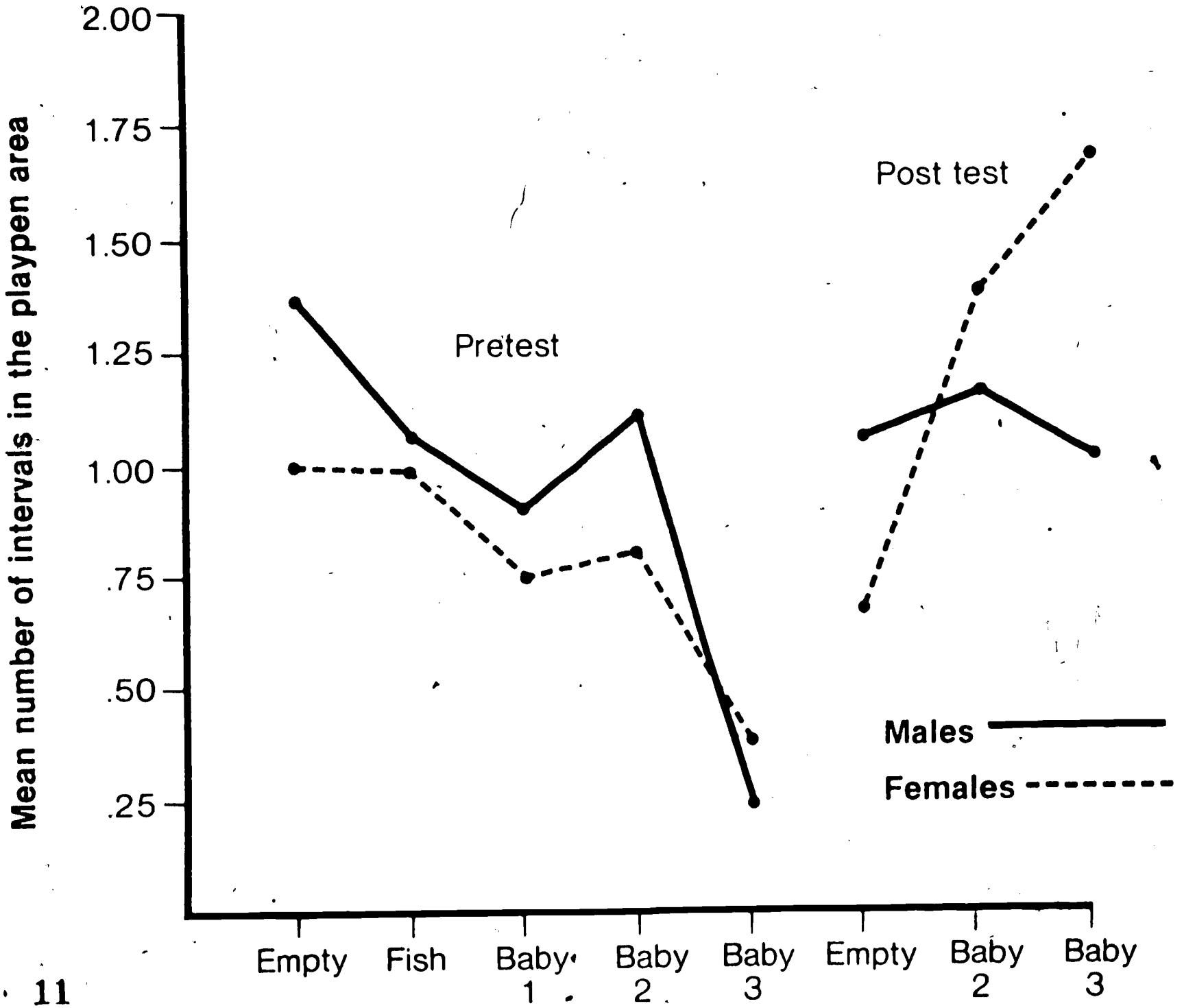

Figure 1. Mean number of intervals spent by boys and girls near the playpen on various days.